

**Abstract**

A master node in a packet ring network periodically sends a packet  
5 containing a discovery marker into the packet ring network. As each node in turn  
receives the packet, each adds its own discovery marker, which contains its topology  
information, to the packet, saves the topology information of others, and resends the  
packet to the next node in the ring. Eventually, the master node receives the packet  
10 containing a chain of discovery markers for all active nodes terminated by the  
master's own discovery marker, so the master node then removes its own discovery  
marker and resends the packet in to the ring network. Each node in turn then  
removes its own discovery marker. In this way, all nodes in the ring see topology  
information for every other active node.

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